

1. A head-mounted illuminator configured for use with a source of light,  
2 comprising:
    - a housing with a hollow interior having a light-receiving end and a light-projecting end;
    - an optical fiber carrying light from the source of light into the interior of the housing through the light receiving end;
    - a Fresnel lens mounted in the light-projecting end of the housing for receiving light from the optical fiber and projecting the light into a field of view, the Fresnel lens having a two sides, one with a sets of grooves; and
  - 10 wherein the grooves of the Fresnel lens face the interior of the housing.
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2. The head-mounted illuminator of claim 1, wherein the light-projecting end of the housing may be moved forward and backward relative to the light-receiving end to adjust the beam diameter of the light projected into the field of view.
  
  3. The head-mounted illuminator of claim 1, wherein the light-projecting end and the light-receiving end of the housing are connected with a threaded coupling, enabling the light-projecting end to be moved forward and backward relative to the light-receiving end to adjust the beam diameter of the light projected into the field of view.
  
  4. The head-mounted illuminator of claim 1, wherein the Fresnel lens is made of acrylic.
  
  5. The head-mounted illuminator of claim 1, wherein the light-projecting end of the housing is conical in shape, and terminates with a diameter larger than that of the light-receiving end.
  
  6. The head-mounted illuminator of claim 1, further including a mechanism for mounting the housing to a wearer's head.

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7. The head-mounted illuminator of claim 1, further including a mechanism  
2 for pivotally mounting the housing to a wearer's head.